



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/765,924	01/29/2004	Takeshi Nomura	396.43428X00	2651

20457 7590 10/04/2005

ANTONELLI, TERRY, STOUT & KRAUS, LLP
1300 NORTH SEVENTEENTH STREET
SUITE 1800
ARLINGTON, VA 22209-3873

EXAMINER

TRAN, THAO T

ART UNIT	PAPER NUMBER
----------	--------------

1711

DATE MAILED: 10/04/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/765,924

Applicant(s)

NOMURA ET AL.

Examiner

Thao T. Tran

Art Unit

1711

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 June 2005.
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2,7 and 11-16 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 1,2,7 and 11-16 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Response to Amendment

1. This is in response to the Amendments filed 6/22/2005. A Terminal Disclaimer filed on the same date is also acknowledged.
2. Claims 1-2, 7, 11-16 are currently pending in this application. Claims 3-6 and 8-10 have been canceled. Claims 12-16 have been newly added. Claims 1-2 and 7 have been amended.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

4. Claims 1-2, 7, and 11-16 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Claim 1 contains the newly added limitation, “mainly an alkylene oxide adduct of xylylenediamine” that has no support in the specification as originally presented. The specification discloses a polyurethane resin-cured material formed from a composition comprising an active hydrogen-containing compound (A), and gives alkylene oxide adduct of xylylenediamine as an example for compound (A). However, there is no where in the

Art Unit: 1711

specification that one would find the polyurethane resin-cured material formed from a composition comprising mainly compound (A) or specifically mainly alkylene oxide adduct of xylylenediamine.

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claims 1-2, 7, and 11-16 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 is indefinite due to the use of "mainly an alkylene oxide adduct". It is unclear to the examiner what Applicants are trying to claim. The word "mainly" does not define what percentage of the adduct there is in the resin-cured material. Clarification of the word "mainly" is required.

Double Patenting

7. In view of the prior Office action of 3/22/2005, the rejection of claims 1-11 under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-40 of copending Application No. 10/453,609, has been withdrawn due to the Terminal Disclaimer timely filed on 6/22/2005.

Claim Rejections - 35 USC § 102

8. In view of the prior Office action of 3/22/2005, the rejection of claims 1-2, 7, 11-16, under 35 U.S.C. 102(b) as being anticipated by Tawa et al. (EP 1081170) has been withdrawn due to further consideration.

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claims 1-2, 7, and 11-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tawa et al. (EP 1081170) in view of Otani et al. (JP 58-204018).

Tawa discloses a gas barrier film, comprising a base film layer and a polyurethane resin layer (see abstract). The base film layer comprises polyolefin or polyester (see paragraph 0059). The polyurethane resin is obtained by reacting a diisocyanate, such as xylylene diisocyanate, a diol, such as C2-8 alkylene glycol, and a diamine. The polyurethane resin contains repeating units of a hydrocarbon ring derived from an aromatic compound at a proportion of about 20-60% by weight (see paragraphs 0011-0012, 0014, 0045-0046). A diamine such as xylylenediamine is used as a chain extender or a crosslinker (see paragraph 0026).

However, Tawa does not disclose the use of an alkylene oxide adduct of xylylenediamine in the preparation of the polyurethane.

Art Unit: 1711

Otani discloses an excellent heat-resistant polyurethane resin prepared by reacting an alkylene oxide adduct of xylylenediamine alone or together with a different polyfunctional polyol, with an aromatic polyisocyanate.

Therefore, it would have been obvious to one of ordinary skill in the art, at the time the invention was made, to have employed the alkylene oxide adduct of xylenediamine, as taught by Otani, in the preparation of the polyurethane resin of Tawa, for the purpose of enhancing heat-resistant of the gas barrier layer.

Response to Arguments

11. Applicant's arguments with respect to the rejection of the claims as anticipated by Tara have been considered but are moot in view of the new ground(s) of rejection.

Contact Information

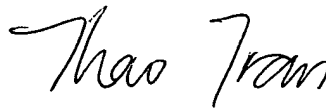
12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thao T. Tran whose telephone number is 571-272-1080. The examiner can normally be reached on Monday-Friday, from 9:00 a.m. - 5:30 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Seidleck can be reached on 571-272-1078. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 1711

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

tt
September 9, 2005



THAO T. TRAN
PATENT EXAMINER